

§ 111.81-1

interlocked in such a way that the receptacle's contacts are deenergized before the making or breaking of the connection between the plug and receptacle contacts.

(b) Each group of receptacles for refrigerated containers must have:

(1) A switch near the receptacles that disconnects all power to those receptacles; and

(2) A sign stating that the switch should be opened before cables are disconnected from the receptacles or refrigerated containers.

(c) Each receptacle for refrigerated containers must be designed for circuit breaking service.

Subpart 111.81—Outlet Boxes and Junction Boxes

§ 111.81-1 Outlet boxes and junction boxes; general.

(a) The requirements of this subpart apply to each outlet box used with a lighting fixture, wiring device, or similar item, including each separately installed connection and junction box.

(b) An outlet box must be at each outlet, switch, receptacle, or junction point.

(c) Each outlet or junction box must have a cover unless a fixture canopy, switch cover, receptacle cover, or other cover is used.

(d) As appropriate, each outlet-box or junction-box installation must meet the following standards, all of which are incorporated by reference (see 46 CFR 110.10-1): Article 314 of NFPA NEC 2002; UL 50; UL 514A, UL 514B, and UL 514C; IEC 60092-101; IEC 92-201; IEC 92-306; IEC 60092-352; IEC 92-401; and IEC 60092-502.

(e) Each outlet or junction box must be securely attached to its mounting and be affixed so as to maintain its designated degree of protection.

(f) Each outlet and junction box must be suitable for the environment in which it is installed and be constructed to the appropriate NEMA or IEC standard.

[CGD 74-125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94-108, 61 FR 28283, June 4, 1996; USCG-2003-16630, 73 FR 65199, Oct. 31, 2008]

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§ 111.81-3 Cables entering boxes.

Each cable entering a box or fitting must be protected from abrasion and must meet the following:

(a) Each opening through which a conductor enters must be closed.

(b) Cable armor must be secured to the box or fitting.

(c) Each cable entrance in a damp or wet location must be made watertight by a terminal or stuffing tube.

Subpart 111.83—Shore Connection Boxes

§ 111.83-1 General.

Each shore connection box must be of a size that accommodates the connections of the flexible and fixed cables.

§ 111.83-5 Bottom entrance and protected enclosures.

Each shore connection box must have a bottom entrance for the shore connection cable. The box must provide protection to the shore connection when the connection is in use.

Subpart 111.85—Electric Oil Immersion Heaters

§ 111.85-1 Electric oil immersion heaters.

Each oil immersion heater must have the following:

(a) An operating thermostat.

(b) Heating elements that have no electrical contact with the oil.

(c) A high temperature limiting device that:

(1) Opens all conductors to the heater;

(2) Is manually reset; and

(3) Actuates at a temperature below the flashpoint of the oil.

(d) Either—

(1) A low-fluid-level device that opens all conductors to the heater if the operating level drops below the manufacturer's recommended minimum safe level; or

(2) A flow device that opens all conductors to the heater if there is inadequate flow.

[CGD 74-125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94-108, 61 FR 28283, June 4, 1996]